

Georgia DOT Bridge No. 155-00032-001.54E
Spanning Sand Creek on State Rout 32
Irwinville vicinity
Irwin County
Georgia

HAER No. GA- 81

HAER
GA
78-IRW.V,
1-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

HISTORIC AMERICAN ENGINEERING RECORD
Southeast Regional Office
National Park Service
U.S. Department of the Interior
Atlanta, Georgia 30303

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Location: Spanning Sand Creek on State Route 32
Irwinville vicinity, Irwin County, Georgia

UTM: Northing - 3502450
Easting - 266170
Quad: Irwinville, Georgia (U.S.G.S. 7.5 minute)

Date of Construction: 1937-1939, Completed 1939

Designer: C. N. Crocker, Bridge Engineer, Georgia Highway Department

Builder: Georgia Highway Department, Atlanta, Georgia

Present Owner: Georgia Department of Transportation
#2 Capitol Square
Atlanta, Georgia 30334

Present Use: Vehicular bridge; to be demolished in 1993

Significance: GDOT Bridge No. 155-00032-001.54E was constructed in 1937-1939. It was a continuous-stringer type bridge. It is one of approximately 560 bridges of this type found in the State and one of eleven found in Irwin County built prior to 1952. This bridge is representative of those built during the 1930s which utilized treated-timber pilings in the substructure and concrete deck and railing in the superstructure.

Report prepared by: Thomas C. Queen
Transportation Planner II
Office of Environment and Location
Georgia Department of Transportation
3993 Aviation Circle
Atlanta, Georgia 30336

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GDOT Bridge No. 155-00032-001.54E, which was constructed 1937-1939, is located on State Route 32 at Sand Creek, west of Irwinville. The bridge, which has a timber substructure, is known as a continuous-stringer type with steel I-beams.

GDOT Bridge No. 155-00032-001.54E is one of many of its type built by the State Highway Department during the 1930s. Prior to 1930, a variety of bridge types, styles, and materials were used. Beginning around 1930, the State Highway Department began to use a somewhat standardized form for most new bridges which used timber pilings in the substructure. As stated in the Fourteenth Report of the State Highway Board, "on numerous occasions where the bridge site warranted a low cost structure without sacrificing strength or durability, a type of bridge was constructed consisting of treated timber pile structure with I-beam joists and concrete floor slab and rail. This type proved very economical and satisfactory." Less expensive than steel or reinforced concrete, wood substructures enabled the department to satisfy transportation needs throughout the State and resulted in a dramatic increase in bridge construction.

The demands for material and manpower during World War II practically stopped the construction of bridges in Georgia from 1942 to 1945. Only essential projects providing access to war-related industries and roads on the Strategic Highway Network were placed under construction. In the post-war years, timber was no longer used as a bridge-building material by the department. According to the Twenty-Second Report of the State Highway Department, "timber of sizes and stress grades required for the construction of timber bridges has all but disappeared from the local market. Delivered price of timber shipped from the Pacific Coast is too high for consideration. It has, therefore, been necessary for the Division of Bridge and Road Design to develop a design for a low-cost bridge built of available material that will meet the need formerly filled by timber bridges. This design provides a bridge of steel and concrete, stronger and more durable than timber bridges and costing but a small fraction more."

Timber substructures are an identifying characteristic of many of the bridges built in Georgia from 1930 to 1942. It was also during this time that reinforced concrete balustrades, with horizontal and/or vertical members, emerged as a popular material for bridge railing. Concrete balustrades, with horizontal members resembling a fence rail, such as those found on the subject bridge, were used extensively through the 1950s and 1960s.

SOURCES

State Highway Board of Georgia. Fourteenth Report of the State Highway Board of Georgia. 1932, p. 167.

State Highway Board of Georgia. Twenty-Second Report of the State Highway Department of Georgia. 1947-1948, p. 59